

FEB 01 2002

510(k) Summary of Safety and Effectiveness

- (1) **Submitter's name:** Scient'x  
**Submitter's address:** Guyancourt, France  
**Contact telephone number:** (512) 834-6255  
**Contact person:** Joanna Droege  
**Date summary prepared:** January 22, 2002
- (2) **Trade or proprietary device name:** ISOBAR Closed Pedicle Screw  
**Common or usual name:** Pedicle screw spinal system  
**Classification name:** Class II
- (3) **Legally marketed predicate device:** ISOBAR U-Line Spinal System (K990118)
- (4) **Subject device description:**

The ISOBAR Spinal System consists of pedicle screws, rods, nuts and crosslink members. It can be used for single or multiple level fixation. The U-line pedicle screws, rods, nuts and crosslink members were cleared on K990118. All components are manufactured from titanium alloy (Ti-6Al-4V) that conforms to ASTM F136.

The additional component that is the subject of this Special 510(k) submission is a pedicle screw with a closed set-screw. It has a U shaped head to accept a rod in the same manner as the U-line screw. The difference is the set-screw used to secure the rod into place. As the set-screw is tightened the rod is secured in the U slot of the screw and is fixed in position.

(5) **Subject device intended use:**

The ISOBAR Closed Pedicle Screw is to be used in conjunction with the ISOBAR Spinal System, a pedicle screw system intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of thoracic, lumbar, and sacral spine: degenerative spondylolisthesis with objective evidence of neurological impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudarthrosis).

As a pedicle screw system, the ISOBAR Spinal System is intended for the treatment of severe spondylolisthesis (Grade 3 and 4) of the L5-S1 vertebrae in skeletally mature patients receiving fusion by autogenous bone graft having implants attached to the lumbar and sacral spine (L3 to sacrum) with removal of the implants after the attainment of a solid fusion.

When used as a posterior, non-cervical, non-pedicle screw fixation system, the ISOBAR Spinal System is intended for hook fixation from T1 to the ilium/sacrum. The non-pedicle screw indications are spondylolisthesis, degenerative disc disease (as defined by back pain of discogenic origin with degeneration of the disc confirmed by history patient history and radiographic studies), deformities (scoliosis, kyphosis and lordosis), tumor, pseudoarthrosis, trauma (fracture or dislocation) and/or previous failed fusion surgery.

(6) **Performance data:**

The Food and Drug Administration have established no performance standards applicable to pedicle screw spinal systems. However, static and fatigue compression testing was performed according to ASTM F1717-96.

(7) **Basis for substantial equivalence:**

The ISOBAR Closed Pedicle Screw is similar in design, materials and indications ISOBAR U-Line Screw (K990118).



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

FEB 01 2002

Scient'X  
c/o Ms. Joanna Droege  
Regulatory/QA Manager  
Encore Orthopedics  
9800 Metric Boulevard  
Austin, Texas 78758

Re: K020245  
Trade Name: ISOBAR Closed Pedicle Screw  
Regulatory Number: 21 CFR 888.3070, 21 CFR 888.3070, 21 CFR 888.3050  
Regulation Name: Pedicle Screw Spinal System, Spondylolisthesis Spinal Fixation  
Device System, Spinal Interlaminar Fixation  
Orthosis,  
Regulatory Class: II  
Product Code: MNH, MNI, KWP  
Dated: January 22, 2002  
Received: January 24, 2002

Dear Ms. Droege:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirement, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might

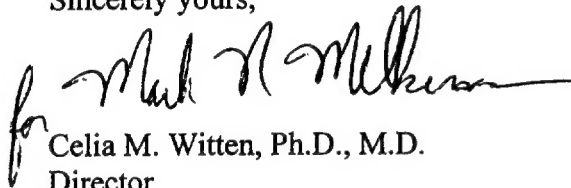
Page 2 - Ms. Joanna Droege

have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597, or at its Internet address "<http://www.fda.gov/cdrh/dsmamain.html>".

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten", with a stylized flourish at the end.

Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

K020245

510(k) Number (if known): K020245Device Name: ISOBAR Closed Pedicle Screw

Indications For Use:

**ISOBAR Closed Pedicle Screw****Indications For Use**

The ISOBAR Closed Pedicle Screw is to be used in conjunction with the ISOBAR Spinal System, a pedicle screw system intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of thoracic, lumbar, and sacral spine: degenerative spondylolisthesis with objective evidence of neurological impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudarthrosis).

As a pedicle screw system, the ISOBAR Spinal System is intended for the treatment of severe spondylolisthesis (Grade 3 and 4) of the L5-S1 vertebrae in skeletally mature patients receiving fusion by autogenous bone graft having implants attached to the lumbar and sacral spine (L3 to sacrum) with removal of the implants after the attainment of a solid fusion.

When used as a posterior, non-cervical, non-pedicle screw fixation system, the ISOBAR Spinal System is intended for hook fixation from T1 to the ilium/sacrum. The non-pedicle screw indications are spondylolisthesis, degenerative disc disease (as defined by back pain of discogenic origin with degeneration of the disc confirmed by history patient history and radiographic studies), deformities (scoliosis, kyphosis and lordosis), tumor, pseudoarthrosis, trauma (fracture or dislocation) and/or previous failed fusion surgery.

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

RECEIVED

JUN 24 11 46 AM '02

FDA/CDRH/ODE/B-100

Prescription Use ☒

OR

Over-The-Counter Use ☐

(per 21 CFR 801.109)

(Optional Format 1-2-96)

for Mark N. [Signature]  
 (Division Sign-Off)  
 Division of General, Restorati  
 and Neurological Devices

510(k) Number K02024551517  
OR  
II